

ENVIRONMENTAL BASELINE SURVEY
SNAKE CREEK
LOCAL TRAINING AREA,
MIRAMAR FLORIDA



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January 2004

EXECUTIVE SUMMARY

This Environmental Baseline Survey (EBS) is being prepared in advance of the potential outgrant of the North Portion (North of Snake Creek Canal) of the Snake Creek Local Training Area (Snake Creek LTA) property. This EBS was also prepared to determine and record the present Environmental Condition of the Property (ECOP) for the entire site as described in AR 200-1 to act as a guide for future actions.

This EBS summarizes data on all land and facilities located inside the boundary limits of the Snake Creek LTA property. It was performed in accordance with ASTM E 1527-00 and the National Guard Bureau EBS Standard Operating Procedures (SOP) (February 1999) and fulfills the requirements of AR 200-1. The Assessment is required to show due diligence on the part of the Florida Army National Guard (FLARNG) to conduct the necessary steps to prevent future environmental liability under 42 U.S.C. 9620(h) (CERCLA).

The methodology used to complete this Phase I EBS complies with ASTM E 1527-00, and the National Guard Bureau EBS Standard Operating Procedures (SOP) (February 1999). The survey included reviews of available current and historic reports, data, analyses, records, and photographs pertaining to the subject site. An inspection of the property and interviews with knowledgeable personnel regarding the site history and environmental condition were also conducted.

HISTORY AND CURRENT USE

The Snake Creek LTA was originally used by the U.S. Air Force as a Nike Hawk Missile Launch facility during a seventeen-year period commencing with the Cuban Missile Crisis (1962-1979). After deactivation as a Hawk Missile Site, the facility was deeded to the Army National Guard as a weekend training site. The site has been unoccupied since that time. Southeastern Archaeological Research, Inc. (SEARCH) performed a cultural resources study of the site in April 2002. The study determined that this facility does not meet the criteria for inclusion in the National Register of Historic Places due to its dilapidated state.

FACILITY FINDINGS

Southern Property (South of Snake Creek Canal)

1. There are unauthorized and unregulated dumpsites throughout the property. These dumpsites are overgrown with vegetation and could impede the environmental restoration of the site.
2. Most of the buildings on site are suspected of containing asbestos containing materials. There is no known asbestos survey performed for this property. An asbestos survey is in work by the US Army Corps of Engineers, Mobile District.
3. The buildings on site are also suspected of being coated with lead based paints (LBP). As the buildings are slated for demolition, a LBP survey is also currently in work by the US Army Corps of Engineers. Both the Asbestos and LBP surveys are scheduled for completion by the end of December 2003.
4. The fences around the site are in a state of disrepair and do not prevent casual entry to the site by neighborhood residents. The lack of competent fencing is currently being addressed by the FLARNG with a local fencing contractor under FMO Project No. 201160 that will provide new fencing for the Southern portion of the property.

5. During site inspection, it was noted that there are trails cut into the vegetation and apparent unauthorized use of same by ATV's and other vehicles to gain access to the borrow pit area for recreational use. There are signs of small campfires around the pit.
6. Site potable water was originally supplied by a 6-inch well on the property. The well has been properly abandoned in accordance with South Florida water Management District (SFWMD) regulations. The well was grouted from bottom to top by Partridge Well Drilling, Inc. of Orange Park, Florida on January 25, 2001. The two water pumps connected to the well are unserviceable.
7. An onsite package plant provided sewer service to the site. The package plant is also unserviceable. The structure is badly rusted and not safe to access by existing stairs and catwalks. There are large Brazilian Pepper trees growing up through the facility. The liftstation and blower building adjacent to the plant is open to casual access. The wetwell cover plates are missing, leaving the wet well open and exposed to general access. Note that liftstation wet wells along with the treatment plant tanks are considered to be permit required confined spaces.
8. There are no known active water/ wastewater/ stormwater permits for the Snake Creek LTA.
9. Although the region surrounding the facility was once part of the Everglades, it was drained many years ago, and no wetland areas appear to remain on or immediately surrounding the site. A wetlands survey will be performed and documented in a forthcoming Environmental Assessment of the site. Several swales were observed on the site and due to the appearance of the soils it is likely that non-jurisdictional wetlands do exist on the site.
10. All of the buildings on the property have been heavily vandalized and are not considered useable in their present condition. All doors, windows and potentially valuable equipment have been scavenged, with the exception of the steel and asbestos blast doors and escape hatches in the underground bunkers and the electrical pumps in the lift station and pump house.
11. There is a steep sided borrow pit/pond on the site. This unfenced pit could pose a danger to children. It was reported that a junk automobile is located in the borrow pit, however it was not visible at the time of the site inspection.
12. The three bermed bunkers on site pose a potential entrapment hazard because the blast doors and escape hatches are still in place and could jam shut.
13. The site is heavily overgrown with Brazilian Pepper and other exotic tropical species.

Northern Property (North of Snake Creek Canal)

1. Fencing of the property is of poor quality and is not well maintained. In some areas, the tangled exotic vegetation on the property borders is all that keeps the animals pastured there on site.
2. There are several areas on this site that are used to store used tires and other unauthorized items.
3. Several herbaceous invasive species were noted in the pasturelands. Noted were Tropical Soda Apple and Melaleuca.
4. Near the midpoint east and west, there is an obvious slough containing Willow and other wetland vegetation. Due to the existing grazing and presence of commercial beef cattle on the site SpecPro personnel did not investigate this wetland area any further. Access to the property was not requested from the cattle owner; therefore SpecPro did not enter the grazing

lease. This grazing is unauthorized by the FLARNG, and no lease is in existence for this activity.

COMPLIANCE ISSUES

South Property (South of Snake Creek Canal):

1. ACM reporting and abatement (Section 4.5.5).
2. LBP reporting and abatement.
3. The multiple dumpsites on the facility are the result of unauthorized activity of this nature.
4. There is an apparent outfall, a storm water ditch, and an abandoned pump station on the northern side of the South Property with a discharge from the drainage ditch through a control structure to Snake Creek Canal. This outfall would be considered a point source discharge and should be covered by a NPDES permit if it is put back into operation or allowed to discharge storm water by gravity to the Snake Creek Canal. It is suggested that the pump-station structure and the outfall be demolished or otherwise sealed so as to ensure no flow of storm water can be discharged.

CONTAMINATION CATEGORY

The Northern portion of the subject property is classified as a contamination **CATEGORY 1** property as discussed in NGB EBS SOP dated February 1999 (Areas where no storage, release, or disposal of hazardous substances or petroleum products has occurred, including no migration of these substances from adjacent areas).

The Southern portion of the property is considered a **CATEGORY 7** property (Areas that are unevaluated or require additional evaluation).

RECOMMENDATIONS

1. This EBS identifies potential substances of concern as Asbestos, LBP, PCBs, and possibly chlorinated solvents associated with the southern portion of the Snake Creek LTA. Further investigation of the environmental condition of this portion of the property is warranted.
2. Inoperative equipment and trash piles should be removed from both properties.
3. Invasive plant species should be eradicated to the extent practical.
4. Fencing and placarding around the properties should be installed or replaced.

There were no impediments to the outgranting of the North Property (North of Snake Creek Canal) discovered. Therefore it is recommended that the outgranting of the North Property of the property proceed as planned.

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1.0 INTRODUCTION

1.1. AUTHORITY

Under Contract number DAAA09-010G-0009, delivery order 0010, issued by HQ OSC, AMSOS-CCE-D, SpecPro Inc. was tasked to provide an Environmental Baseline Survey (EBS) in accordance with Army Regulation (AR) 200-1 for the Florida Army National Guard (FLARNG) Snake Creek LTA near Hollywood Florida.

1.2. SCOPE

This EBS summarizes data on all land and facilities located inside the boundary limits of the Snake Creek LTA. This EBS was performed in accordance with ASTM E 1527-00 and the National Guard Bureau EBS Standard Operating Procedures (SOP) (February 1999) and fulfills the requirements of AR 200-1.

1.3. REAL PROPERTY TRANSACTION TYPE

This report was prepared in advance of the potential outgrant of the Northern portion of the property. The report was also designed to act as a guide for future actions in activating the Southern portion of the property as a weekend training center.

2.0 PURPOSE

The purpose of this Environmental Baseline Survey (EBS) is to assess and document the existing Environmental Condition of Property (ECOP) at Snake Creek LTA in accordance with AR 200-1 and the FLARNG EBS SOP (Feb.1999). The EBS is required to show due diligence on the part of the FLARNG to conduct the necessary steps to prevent future environmental liability under 42 U.S.C. 9620(h) (CERCLA). This EBS may also be used by FLARNG in preparing an outgrant of the Northern portion of the property.

3.0 SURVEY METHODOLOGY

The methodology used to complete this EBS complies with ASTM E 1527-00, and the National Guard Bureau EBS Standard Operating Procedures (SOP) (February 1999). The survey included reviews of available current and historic reports, data, analyses, records, and photographs pertaining to the subject site. An inspection of the property and interviews with knowledgeable personnel regarding the site history and environmental condition were also conducted.

Appropriate environmental, health, and safety personnel have analyzed the results of all sampling, investigations and other data pertaining to this site which have been made available to SpecPro to determine if any health, occupational, or safety risks are associated with the current and/or intended use of the property.

3.1. DESCRIPTION OF DOCUMENTS REVIEWED

Research conducted for the preparation of this EBS included a review of the following documents:

3.1.1 Federal ASTM Standard Sources

- 1) National Priority List (NPL)
- 2) Proposed NPL
- 3) SuperFund (CERCLIS) No Further Remedial Action Planned (CERC-NFRAP)
- 4) Corrective Action Reports (CORRACTS)
- 5) Resource Conservation and Recovery Information System (RCRIS)
 - Temporary Storage Depot (TSD) database
 - Large Quantity Generator (LQG) database
 - Small Quantity Generator (SQG) database
- 6) Emergency Response Notification System (ERNS)

3.1.2 Federal ASTM Supplemental Sources

- 1) SuperFund (CERCLA) Consent Decrees (CONSENT)
- 2) Records Of Decision (ROD)
- 3) National Priority List Deletions (Delisted NPL)
- 4) Federal SuperFund Liens (NPL Liens)
- 5) Facility Index System/Facility Identification Initiative Program Summary Report (FINDS)
- 6) Hazardous Materials Information Reporting System (HMIRS)
- 7) Material Licensing Tracking System (MLTS)
- 8) Mines Master Index File (MINES)
- 9) PCB Activity Database System (PADS)
- 10) RCRA Administrative Action Tracking System (RAATS)
- 11) Toxic Chemical Release Inventory System (TRIS)
- 12) Toxic Substances Control Act (TSCA)
- 13) Section 7 Tracking Systems (SSTS)

- 14) Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA)/ Toxic Substances Control Act (TSCA) Tracking System (FTTS FIFRA/ TSCA)

3.1.3 State ASTM Standard Sources

- 1) Florida's State-Funded Action Sites (SHWS)
- 2) Solid Waste Facility Database (SWF/LF)

3.1.4 State and Local ASTM Supplemental Sources

- 1) STI02 - Facility/Owner/Tank Report (AST)
- 2) Florida Sites List
- 3) Florida Cattle Dipping Vats database
- 4) Oil and Hazardous Materials Incidents database
- 5) Priority Cleaners Ranking List
- 6) Dry-cleaning Facilities List
- 7) Wastewater Facility Regulation Database

3.1.5 National Guard supplied sources

- 1) FLARNG-CFMO Facility Inventory and Support Plan, 15 July 2002
- 2) Various Telephone conversation logs and memorandums concerning the property

3.1.6 Physical Setting Sources

- 1) USGS 7.5 min quad index 2425080-H3 OPA-LOCKA, FL;
- 2) FEMA Flood Electronic Data;
- 3) Florida Wetlands Data was obtained from the National Wetlands Inventory (NWI) of U.S. Fish & Wildlife Service (1994);
- 4) NWI Opa-Locka Quad map Flood Plain Panel 12011C0295F;
- 5) EDR Aquiflow® Shallow well database and Information System;
- 6) Geologic age and stratigraphic Map, USGS Digital Data Series DDS - 11 (1994);
- 7) The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) STATSGO soil type data base;
- 8) Federal USGS Well Information Database;
- 9) EPA/Office of Drinking Water Public Water Systems (PWS);
- 10) EPA/Office of Drinking Water Public Water Systems Violation and Enforcement Data;
- 11) Federal FRDS Public Water Supply System Information Database;
- 12) FL Department of Environmental Protection, Groundwater Quality Monitoring well database;
- 13) South Florida Water Management District water well database;
- 14) The Florida Sinkhole Research Institute, University of Florida, gathered the sinkhole data;
- 15) The National Radon Database, developed by the U.S. Environmental Protection Agency.

3.1.7 Historical Data sources

- 1) Phase 1 Cultural resources Survey of the Snake Creek Weekend Training Facility, April 2002;
- 2) Phase 1 Cultural Resource Survey of the Snake Creek Weekend Training Facility, Miramar.

3.2. PROPERTY INSPECTIONS

SpecPro accomplished the preliminary visual inspection of the subject property on February 5, 2003. The inspectors were environmental professionals experienced in this type of investigation. The scope of the inspection included a visual review of the property inside the boundary perimeter and adjacent property accessible to the observers. All accessible structures within the subject area were also inspected. . A photographic log of the site's facilities is included as Appendix A. Based on the preliminary site inspection, further environmental sampling is recommended.

3.3. PERSONNEL INTERVIEWS

The following individuals were contacted and questioned to obtain information regarding the previous and current land use and/or environmental condition of the subject property:

Major Mark Widener, FLARNG Environmental Protection Specialist,
Construction & Facility Management Office

3.4. ENVIRONMENTAL SAMPLING**3.4.1 Groundwater Sampling**

No groundwater sampling was accomplished during preparation of this EBS. No records of previous sampling were available or reviewed. Groundwater sampling is proposed for further action in this report.

3.4.2 Soil Sampling

No soils were sampled for this investigation. No records of previous sampling were available or reviewed. Soil sampling is also proposed for further in this report.

3.4.3 Asbestos sampling

No Asbestos surveys for the facilities at the training center have been prepared. Asbestos sampling is suggested in this EBS.

3.4.4 Lead Based Paint Sampling

No Lead Based Paint sampling has been accomplished or is proposed for the Snake Creek LTA.

3.4.5 Radon Sampling

No sampling for radon has been completed or is proposed for the Snake Creek LTA. Data for this site is based on published EPA data.

4.0 FINDINGS FOR SUBJECT PROPERTY

4.1. BOUNDARIES OF THE PROPERTY AND SURVEY AREA

The Snake Creek LTA is located on two parcels of land separated by Snake Creek. The Northern portion of land is a 97-acre plot that is actively used as pastureland. The Southern portion of land encompasses 232 acres. The location of the property is:

- Street Address:
Miramar/Snake Creek National Guard Reservation, Hollywood, FL 33025;
Township 51 South, Range 40 East, Section 36 within Broward County, on the Dade County line.
- Coordinates:
25.962250 - 25° 57' 44.1" Latitude (North),
80.304932 - 80° 18' 17.8" Longitude (West);
- Zone 17 Universal Transverse Mercator:
569585.5 UTM X (Meters),
2871525.5 UTM Y (Meters);
- USGS Topographic Map:
2425080-H3 OPA-LOCKA, FL

The Snake Creek LTA location is displayed in Figures 4-1 and 4-2

Figure 4-1 Snake Creek LTA Locator Map



Figure 4-2 Snake Creek LTA Location.

4.2. HISTORY AND CURRENT USE

The site on which the Training Center is located was originally a portion of the Everglades wetland area. After the Snake Creek canal was installed to drain the wetlands in 1952, the property laid fallow until the property was utilized by the United States Air Force as a Nike Hawk air defense missile site (designated HM01/03) during and following the Cuban Missile Crisis (1962-1979). The Nike Hawk was a long range, high speed, solid fueled ground to air missile. The permanent buildings on site were erected in 1965. There were three launch sites on the base, each with it's own emergency power supply, launcher capable of carrying three missiles, magazine/storage building and underground bunker. The site also had it's own sewage treatment facility, water supply, headquarters, and technical facility to clean, process and test the missiles and electronics prior to their deployment to the launch sites. After its closure in 1979, the site of the headquarters and barracks was given to the United States Postal Service for a local post office and the remainder of the site was given to the National Guard for a training center. The portion of the original property included in this EBS has been unoccupied since that time.

4.3. FACILITIES

The FLARNG Facility Inventory and Support Plan (FISP), dated July 2002, identifies 41 facilities and areas within the subject property. Of these facilities and areas, 19 buildings and two structures were evaluated by the SEARCH Cultural Resources Survey. No map detailing the various buildings was included with the FISP, and the building designations used in the Cultural Resources Study in some cases differed from those used in the FISP. As much as possible these identified buildings are cross-indexed with the FISP as shown in Table 4-1. The locations of these facilities are shown in Figure 4-3. Figure 4-3 was taken from the SEARCH Cultural resources. The numbers presented in this figure are State Historic Preservation Office (SHPO) master File Numbers and do not indicate a cultural or historic resource. Pictures of the complex's facilities are included in Appendix A.

TABLE 4-1 BUILDINGS ON THE SNAKE CREEK LTA

FISP Inventory Number (*1)	Cultural Resources Study Designation (*2)	Building Type
43	45	Administrative Building
45	90	Restricted area guard house
46, 61, 69	88	Launcher storage/Magazine
53, 55, 62	87	Generator Shed
52, 54, 63,	89	Blockhouse/launch control (*3)
46, 61, 69	81	Launcher storage/Magazine
53, 55, 62	83	Generator Shed
52, 54, 63,	82	Blockhouse/launch control
46, 61, 69	86	Launcher storage/Magazine
53, 55, 62	85	Generator Shed
52, 54, 63,	84	Blockhouse/launch control
73	80	Missile Assembly and Electrical Test (*4)
74, 75	79	Guard Dog Kennels
76	46	Sewage Lift Station (*5)
77	47	Sewage Treatment Plant
	91	Water system pump house & well (*6)
	43	Generator shed
	44	Generator shed
	92	Water gate between Snake Creek and drainage ditch
	93	Snake Creek
	42	Guard post (not seen during field visit) (*7)

*1 All FLARNG Facility numbers begin with 030

*2 All Cultural Resources Study numbers begin with 8BD33 and are SHPO Master File Numbers.

*3 Listed in Facilities plan as "Admin, GP" and in Cultural Resources as "building built into berm"

*4 Listed in Facilities Inventory as "Admin, GP"

*5 Listed in Cultural Resources as "Water Works"

*6 Listed in Cultural Resources as "Water Storage"

*7 Listed in Cultural Resources as "Guard Post"

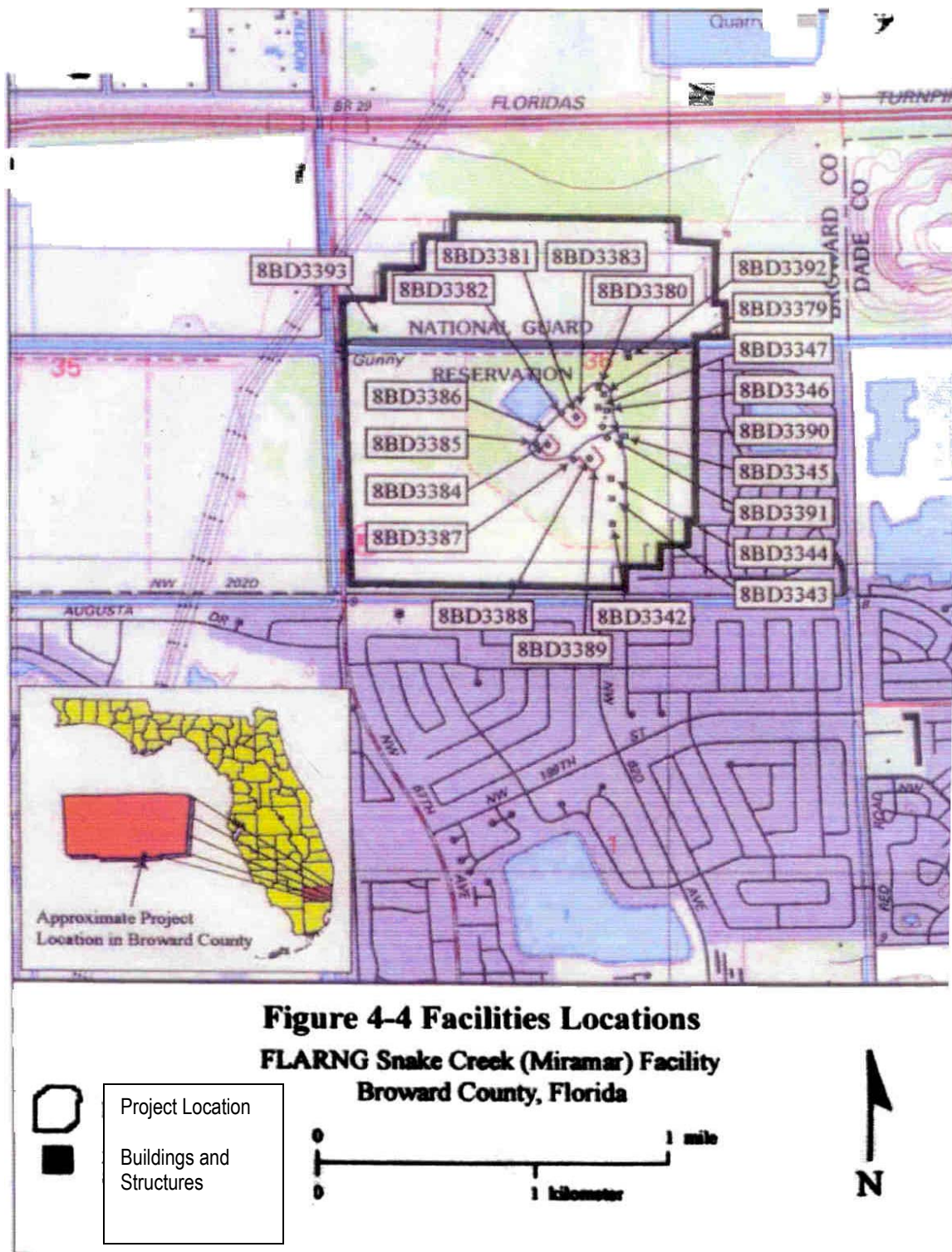


Figure 4-3 (Fig. 4-4 from SEARCH CRS) Facilities Locations, Snake Creek LTA

4.4. ENVIRONMENTAL SETTING

4.4.1 Natural Resources

The subject property is situated to the west of the Atlantic Coastal ridge in the Eastern Everglades, and within the Okeechobee basin. The Eastern Everglades are dominated by herb-covered marshes consisting of sawgrass and wet prairies. The Snake Creek canal, which bisects the site, was built in 1952. Since the building of this canal, the region surrounding the Snake Creek LTA has been drained and lost its natural character.

The land is approximately five feet above mean sea level in elevation and is flat. All of the soils on the property are poorly drained. The dominant soil type on site is Margate Fine Sand. Also found on site are Basinger fine sand, Plantation Muck, and modified Hallandale and Margate soils surrounding the buildings.

A Threatened and Endangered Species Habitat Assessment was prepared for this site in January 2002. During that assessment it was determined that the site is not a good potential habitat for any native Florida endangered species due to the prevalence of invasive tropical species found on site. No endangered species were seen to be present on the site.

The site to the south of Snake Creek is heavily overgrown with exotic tropical plants (primarily Brazilian Pepper and some Melaleuca, Australian pine, Tropical Soda Apple, Caster Bean, etc). Of the 118 species cataloged for the endangered species study in this area, 40 were invasive and 70 were weedy. Several large, wild Banyan trees were also noted. These trees may be considered for saving when the rest of the undergrowth is removed. Small vegetable gardens and tropical fruit orchards were seen to encroach on the Snake Creek LTA in several areas.

The borrow pit is steep walled and not surrounded by fencing. With the lack of adequate fencing for the property in general, this pit/pond may pose a safety hazard to site visitors.

The portion of the site North of Snake Creek is divided into pastureland with many invasive species located in and along the boundaries of the fields. 73 species were reported in the two large pastures on this portion of the property, 26 of which were exotic, and 30 of which were weedy. In many places, the tangles of trees in the borders were more effective at keeping livestock in bounds than the remnants of fence present.

4.5. HAZARDOUS SUBSTANCES, MATERIALS AND PETROLEUM PRODUCTS

4.5.1 Explosives and Ordnance

During reviews of site historical documents, no mention was made of Nike Hawk missiles at this site being fired. These missiles were reported to have been stored in large transite buildings with impervious floors.

4.5.2 Pesticides

It is suspected that some herbicides and pesticides have been used over the years at this facility for routine grounds and facility maintenance. However, no records or evidence of non-household handling, storage, release, or disposal of pesticides, within, or immediately adjacent to the subject property exist. At this facility there are no Potential Release Locations identified with pesticide-related concerns and no unusually distressed vegetation was observed.

4.5.3 Medical and Biohazardous Waste

There is no indication that medical or biohazardous wastes have been stored, disposed, or otherwise released to the environment at or adjacent to the subject site. However, with the severe overgrowth and prevalence of small, unauthorized dumpsites, it is impossible at this writing to rule out the presence of these materials. Caution should be observed in the handling and removal of these waste piles from the site.

4.5.4 Polychlorinated Biphenyls (PCB)

During the time period when the facilities at this site were built, PCBs were in general use in high voltage and high heat applications and in ballasts in fluorescent lighting fittings. Non-liquid PCBs were sometimes used in paints for high heat situations. Most of the capacitors, transformers and lighting fixtures which may have contained PCBs have been scavenged from the site, however there may be PCB containing paints and fluorescent lighting fixtures remaining in some of the facilities. Numerous utility poles remain on the site. These poles have been stripped of all high voltage equipment and appurtenances. However, the potential for PCB oil leakage near and around these poles and concrete pads that may have contained oil switches and or transformers should be investigated. Until the presence or absence of PCBs can be documented, all site electrical equipment manufactured from the 1960's through 1977 that may contain PCBs should be assumed to contain PCBs and be handled accordingly. All removed equipment that potentially contains PCBs must be properly disposed of as required by the federal Toxic Substances Control Act (TSCA) and state mandates.

4.5.5 Asbestos

There is a history of asbestos-containing material (ACM) use in the Snake Creek TC facilities. During the site visit, it was noted that many of the structures (the Generator sheds and Launcher storage buildings) were made of transite, an asbestos containing cementitious building material. Pipe joints in the Administration building and the Missile Assembly building have coatings that appeared to contain asbestos, and the ceiling tiles and blast door cores in the bunkers appeared to also be constructed of transite. Before

demolition, occupation, or renovation of these buildings, a site asbestos survey performed by a certified asbestos inspector should be performed.

Note: The abatement of ACM and the demolition of any structure require notification to the FDEP at least 10 days prior to the start of work. Demolition is defined as the removal of any one (single) load-bearing member of any structure.

4.5.6 Radon

No sampling for radon has been completed or is proposed for the Snake Creek property. EPA Radon surveys indicate that radon levels in the area surrounding the Snake Creek LTA are classified as EPA Radon Zone 3, in which the indoor average is <2 picocuries per liter (pCi/L). The established radon health risk level is 4 pCi/L.

4.5.7 Lead-based Paint (LBP)

Because of their ages, and in the absence of a LBP survey, all original coatings on the buildings at this facility should be presumed to consist of lead based paint unless proven otherwise. The intricate and extensive over-painting of the buildings at this site by graffiti would make a formal HUD based LBP survey of the site very difficult and potentially expensive. A lead inspection is not required before demolition of the buildings, but a bulk lead sample should be taken of demolition debris before disposal.

4.5.8 Chlorinated Solvents

Chlorinated solvents are a class of synthetic compounds that are stable, highly volatile, non-flammable, immiscible in and heavier than water. They were used as fire extinguishing agents and cleaning/degreasing compounds in the 1960s and 1970s. It was often a former practice to clean missiles after shipment and prior to use with these compounds, thus allowing the material to escape into the soil and groundwater. The most probable Snake Creek LTA locations for this practice to have occurred would be the down gradient soils beside the concrete apron of the missile assembly building, the leachfield of the wastewater treatment plant, and the ditch bisecting the southern portion of the property.

4.5.9 Solid Waste

There are numerous trash piles and items of abandoned inoperative equipment on both the Northern and Southern portions of the Snake Creek LTA. Especially prevalent in the Southern portion of the site, these unregulated dumps constitute potential dangers to workers engaged in the cleanup of the site and people in the surrounding residential areas, and are potential sources for environmental contamination.

4.6. GROUNDWATER

The surficial water table is generally surficial to within four feet of land surface at this site depending on elevation and recent rainfall history. The surface water and surficial groundwater flow on site is generally toward the borrow pit, the onsite ditch and/or the Snake Creek canal, depending on location.

The Biscayne aquifer underlies an area of about 4,000 square miles and is the principal source of water for all of Dade and Broward Counties and the southeastern part of Palm Beach County in southern Florida. Because the Biscayne aquifer is highly permeable and lies at shallow depths everywhere, it is readily susceptible to contamination. The aquifer is the only source of drinking water for about three million people.

Uncontaminated water in the Biscayne aquifer is suitable for drinking and most other uses. The water is hard, is a calcium bicarbonate type, and contains small concentrations of chloride and dissolved solids. Locally, the water contains large concentrations of iron. (USGS, Ground Water Atlas of the United States, Alabama, Florida, Georgia, South Carolina HA 730-G)

There were no Public Supply Wells reported within one mile of the Snake Creek LTA.

4.7. WASTEWATER TREATMENT, COLLECTION, AND DISCHARGE

Originally, an on site private package plant provided wastewater treatment and discharge through a raised leach field. This system is no longer serviceable, based upon the site inspection performed. Even if rehabilitated, the system could not likely meet current regulatory guidelines. City utilities are available for the properties surrounding the site.

4.8. DRINKING WATER QUALITY

The residences surrounding the site are supplied drinking water by a municipal water system through normal distribution lines. A 6-inch well previously provided potable water for the site, but that well has been properly abandoned and sealed.

4.9. STORAGE TANKS

Review of site records, available underground storage tank (UST) databases, leaking UST reports, and spill incident reports indicates that there have never been any USTs on the property. There are no spill records for the above ground storage tanks (ASTs) associated with the on site generators.

4.10. OIL/WATER SEPARATORS

No oil/water separators are known to have existed at this facility.

5.0 FINDINGS FOR ADJACENT PROPERTIES

5.1 LAND USES

The land immediately surrounding the Snake Creek LTA is heavily urbanized to the east and south of the site, with a mixture of commercial buildings and residential housing. A trailer court bounds the property to the east and there is a regulated landfill approximately ½ mile to the northeast of the site. A quarry is situated ¼ mile north, northeast of the site, residential housing lies across the street to the south of the property, and a golf course is located across the street to the southwest of the site.

5.2 POTENTIAL POLLUTION SOURCES

There is record of a five-gallon oil spill at 19565 NW 57TH Avenue, Miami Florida, 1.25 miles southeast of the property. No other known pollution sources were discovered through review of available information in the sources researched. No facilities of special concern were seen to border the site.

The contents of the wastewater treatment plant and lift station are of concern. This water should be sampled and characterized for final disposal. Wet well and manholes should be cleaned and filled to reduce the potential for groundwater contamination from inflow, infiltration, and leakage. The treatment plant tanks should be dewatered and cleaned to establish a “clean condition” prior to further actions. The outfall and pump station structure at Snake Creek would be a prime candidate to be sampled for potential contamination of the water and soils in the diversion box area. The head-works of the pump station has a set of bar screens and a sump area that would allow settling of solids which may contain more concentrated levels of potential contaminants in the soil and sludges that may exist at this location.

6.0 APPLICABLE REGULATORY COMPLIANCE ISSUES

Review of the EDR Report, and personal interviews indicate there is no record of contamination above Florida Site Cleanup Target Levels at this site.

6.1. REQUIRED NOTIFICATIONS

6.1.1 Northern Property

In accordance with AR200-1, prior to proceeding with a real property transaction, notification of health, occupational, or safety risks associated with the northern portion of the property to the potential recipient and the intended user of the property should be made. There are no known applicable risks associated with this site.

6.1.2 Southern Property

There is no real property transaction currently contemplated for this portion of the property. However, there are notifications that may become necessary as the site is sampled, cleaned up and re-activated.

1. Notification to regulatory agencies may be required if hazardous materials are discovered during sampling and trash cleanup operations.
2. Notification to the adjacent property owners and tenants of the intent to operate heavy equipment on the fence-line between the property and adjacent housing is advisable.

6.2. LIST OF COMPLIANCE ISSUES

All future activities undertaken by the recipient of the Northern Snake Creek property are subject to all applicable federal, state, and local regulations and Instructions. Compliance issues associated with the intended use of the Southern portion of the subject site include, but may not be limited to, the following:

- ACM sampling/abatement/placarding/reporting;
- Suspect PCB issues;
- Suspect LBP issues;
- Suspect Chlorinated solvent contamination;
- Potential unmarked confined space hazard in bunkers.

7.0 CONCLUSIONS

7.1. FACILITY FINDINGS

Review of pertinent historic and recent records, reports, and other documentation, as identified in Section 3.1 of this EBS and interviews held with site personnel indicate that:

Southern Property (South of Snake Creek Canal):

1. The subject site has a *possible* history of hazardous material use in the form of small quantities of PCBs contained in fluorescent lighting ballasts observed on site. There was no evidence noted of the use of wet capacitors or transformers in the power system of the site. It should be assumed that PCB containing high voltage equipment and appurtenances were used at this site due to the time frame the site was in operation.
2. The facilities in the subject area are strongly suspected to contain ACM in reportable concentrations (Section 4.5.5). This material will have to be properly identified and remediated prior to or during site clearing and demolition operations.
3. The National Guard Bureau, in consultation with the Florida State Historic Preservation Officer, has determined that the buildings on the site are not eligible for listing in the NRHP due to their advanced state of disrepair (Section 4.2, Appendix H). However, if potential historic sites or material are discovered during site cleanup operations, they must be reported to appropriate agencies.
5. Lack of competent fencing and placarding around the facility and the borrow pit/pond poses a liability due to site visitation of local residents to the property.
6. The underground bunkers could pose an entrapment/confined space hazard if the heavy fireproof doors and hatches are closed.
7. The buildings on site are heavily vandalized, stripped of all useable or valuable fittings, and covered with graffiti.
8. The site is severely overgrown with Brazilian Pepper and other exotic invasive species.
9. The site is not known to be the habitat for any endangered species (Threatened and Endangered Species Survey of the Snake Creek Training Site, summer and fall, 2001, David Hall Associates and Pandion Systems, Inc.).

Northern Property (North of Snake Creek Canal):

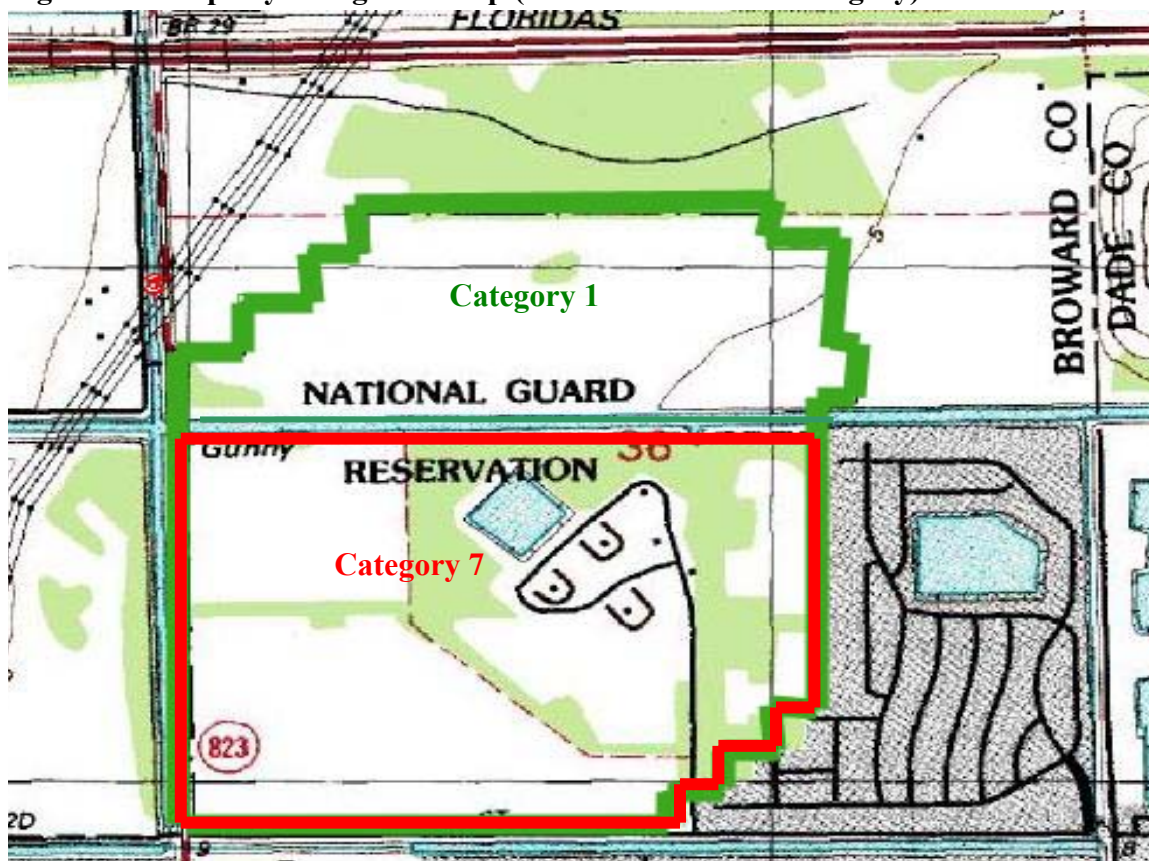
1. There are no known uses of hazardous materials associated with this portion of the property.
2. In places, the heavy infestation by *Melaleuca* trees may constitute a fire hazard.
3. Beyond the cleanup of debris and trash piles, no remediation of this site is indicated at this time.

7.1.1 Property Category

Based on review of appropriate documentation, the EDR Report, and the findings of this EBS, it is concluded that the only remedial measures necessary for the northern portion of the site are the cleanup of the abandoned equipment and trash piles at the site. This

portion of the property is classified as a **CATEGORY 1** property as discussed in ARNG EBS SOP dated February 1999 (Areas where no storage, release, or disposal of hazardous substances or petroleum products has occurred, including no migration of these substances from adjacent areas). However, the southern portion of the subject property is classified as a contamination **CATEGORY 7** (Areas that are unevaluated or require additional evaluation) because of possible PCB, LBP, unregulated solid waste, and ACM considerations. These categories are displayed in Figure 7-1.

Figure 7-1 Property Categories Map (If More Than One Category)



8.0 RECOMMENDATIONS

There are no known impediments to the outgranting of the northern portion of the Snake Creek LTA. That property transaction can proceed as anticipated.

This EBS identifies the following substances of concern associated with the southern property of the Snake Creek LTA:

- ❑ (PCBs) (Section 4.5.4);
- ❑ Asbestos (Section 4.5.5);
- ❑ Lead Based Paints (Section 4.5.7).
- ❑ Unregulated solid wastes (Section 4.5.9)

9.0 CERTIFICATIONS

9.1. CERTIFICATION OF THE ENVIRONMENTAL BASELINE SURVEY

This Environmental Baseline Survey was conducted on behalf of the Florida Army National Guard. Appropriate, available records were reviewed, and visual site inspections of the selected facilities were conducted following an analysis of information during the records search. The information contained within the survey report is based on records available and, to the best of my knowledge, is correct and current as of January 2004.

Certified By: _____ **Date:** _____
Gregg L. Rexroad, CEP
Senior Project Manager, SpecPro, Inc.

Approved by: _____ **Date:** _____
Major Mark S. Widener
Environmental Protection Specialist
Construction and Facility Management Office
Florida Army National Guard

9.2. CERTIFICATION OF PCB CLEARANCE

The northern portion of the subject property is in compliance with 40 CFR 761 as outlined below:

There are no known PCB contaminated wastes, or unserviceable equipment containing any PCBs located on the northern section of the Snake Creek LTA property. Further investigation is required for the southern portion of the property.

Certified By: _____ **Date:** _____
Gregg L. Rexroad, CEP
Senior Project Manager, SpecPro Inc.

Approved by: _____ **Date:** _____
Major Mark S. Widener
Environmental Protection Specialist
Construction and Facility Management Office
Florida Army National Guard

Description/Name of area being excessed:

The Northern Property of the Snake Creek LTA Property, Hollywood Florida 33023.

10.0 DEVIATIONS

There were no major deviations encountered in the accomplishment of this EBS.

11.0 ADDITIONAL SERVICES

No additional services beyond the standards in ASTM E-1527-00 and the NGB SOP were contracted for in the performance of this EBS.

12.0 ACRONYMS AND ABBREVIATIONS

ACM	Asbestos-Containing Material(s)
AR	Army Regulation
AST	Aboveground Storage Tank
ASTM	American Society for Testing and Materials
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CORRACTS	Corrective Action Reports
EBS	Environmental Baseline Survey
ECOP	Environmental Condition of the Property
EDR	Environmental Data Resources, INC.
EPA	United States Environmental Protection Agency
ERNS	Emergency Response Notification System
FDEP	Florida Department of Environmental Protection
FLARNG	Florida Army National Guard
LBP	Lead-Based Paint
LTA	Local Training Area
LUST	Leaking Underground Storage Tanks
NPL	National Priority List
NRHP	National Register of Historic Places
PCB	Polychlorinated Biphenyl
RCRIS	Resource Conservation and Recovery Information System
SCTL	Soil Cleanup Target Levels
SEARCH	Southeastern Archaeological Research, Inc.
SOP	Standard Operating Procedure
TSCA	Toxic Substances Control Act
UST	Underground Storage Tank
USGS	United States Geological Society

Appendices

APPENDIX A

PHOTO DOCUMENTATION

APPENDIX B

DATA SEARCH AGENCY INFORMATION

APPENDIX C

ENVIRONMENTAL BASELINE SURVEY QUESTIONNAIRE

SNAKE CREEK EBS QUESTIONNAIRE

Number	General Liability Concerns	YES	NO	N/A	UNK
A1	Have there been any federal or state enforcement actions against the facility?		X		
A2	Are there any pending enforcement actions against the facility, its owner, or operator?		X		
A3	Has the owner or operator entered into any consent decrees or administrative consent orders?		X		
A4	If so, have these decrees or orders provided a full release from liability?			X	
A5	Has the property or adjoining property been used for gas station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junk yard or landfill, or a waste treatment storage, disposal, processing, or recycling facility?	X			
A6	Does seller's business involve the use, treatment, storage, or disposal of hazardous substances?		X		
A7	Have there been any citizen suits filed against the facility, owner, or operator?		X		
A8	Have there been any regulator warning letters or administrative orders against the facility, owner, or operator?		X		
A9	Have there been any notices of violation, consent orders, or consent decrees sent to the owner or operator under the citizen suit provisions of any statute?		X		
A10	Do any settlement agreements with the government or private parties leave the owner or operator open to subsequent suits on the same issues?		X		
A11	Can the facility incur future liability through non-compliance with the above orders or decrees?			X	
A12	Has the owner or operator received any Requests for Information, Notice and Demand letters or administrative inquiries from any governmental entity with regard to its environmental practices?		X		
A13	Has an "imminent hazard" ever been alleged to exist at the site?		X		
A14	Has the owner or operator not maintained all records required by each environmental statute?			X	
A15	Is the facility out of compliance with any environmental permits?			X	
A16	Do past practices leave the owner or operator open to citizen suits or government enforcement actions?		X		
A17	Has the facility undergone any environmental audits/inspections?		X		
A18	Have audit/inspection deficiencies gone uncorrected?			X	
A19	Have any claims been made under the companies' insurance policies?		X		
A20	Is the company in violation of laws that require insurance policies to cover environmental contingencies?		X		
A21	Is the property adjacent to or on an abandoned mining site?		X		
A22	Is the property adjacent to railroad tracks or underground pipes?		X		
A23	Is the property part of or adjacent to an oil or gas producing property?		X		
A24	Are there any environmental liens or governmental notification relating to past or recurrent violations of environmental laws?		X		

Number	Clean Air Act	YES	NO	N/A	UNK
B1	Does the facility emit air pollutants into the environment?		X		
B2	Is the facility a type for which new standards of performance (NSPS) have been promulgated? See 40 C.F.R. Part 60 for a list of new source categories and applicable standards.		X		
B3	Is the facility in violation or has the facility been in violation of the NSPS or the permit?		X		
B4	Is the facility located in a nonattainment area?		X		
B5	Will the facility be subject to maximum attainable control technology (MACT)?		X		
B6	Is a capital expenditure required to meet the requirements of emissions reductions in the new Clean Air Act, i.e., is the facility required to reduce emissions because it is in a non-attainment area?		X		
B7	Does the facility incinerate any wastes of any kind?		X		

Number	Radon	YES	NO	N/A	UKN
C1	Were the results of an EPA short term radon test performed in the basement above 4pCi/l or 0.02 WL?		X		
C2	Is there evidence that nearby structures have elevated indoor levels of radon or radon progeny?		X		
C3	Have local water supplies been found to have elevated levels of radon or radium?		X		
C4	Is the property located on or near sites that currently are or formerly were used for uranium, thorium or radium extraction or for phosphate processing?		X		
C5	Were the structures constructed from salvaged material from oil wells or other structures characteristic of high radon levels?		X		
	Note: A property may be acceptable for radon if guidelines in AR 200-1, Chapter 11 are met.				

Number	Clean Water Act	YES	NO	N/A	UKN
D1	Does the facility discharge pollutants into the waters of the state or onto land from which pollutants could enter such waters?				X
D2	Even if the discharge was permitted by the state, is there any basis upon which EPA might challenge the variance or exemption as abdicating the state's responsibilities?				X
D3	Are there or has there been any flooring, drains, or walls that are stained by substances other than water or are emitting foul odors?				X
D4	Do the discharge monitoring reports (DMRs) indicate violations of the permit? Have DMR's gone unsubmitted?			X	
D5	Are there any septic tanks, sumps from floor drains, or below-ground oil-water separators?	X			
D6	Have any toxic or hazardous pollutants ever been spilled or otherwise released at the site?				X
D7	Is there cause to believe that any operation or equipment at the facility might be the cause of a future spill or release of a pollutant?		X		
D8	Has the facility neglected to apply for necessary facility NPDES storm water discharge permits?			X	
D9	Has there been any road oiling done on the facility?		X		
D10	Are there any equipment cleaning stations?				X
D11	Are there sinkholes, abandoned manholes, abandoned sewer lines or other aquifer access points?	X			
D12	Are there any oily sheens on the surface water or unusual odors?		X		
D13	Can the facility's Clean Water Act permits be easily transferred?			X	
D14	Are permits required to discharge into the WWTF?			X	
D15	Will a new or modified permit be necessary for an expansion of operations?	X			
D16	Are there any visual evidence of wells?		X		
	Pressure tanks?		X		
	Pipes that extend vertically into the ground?		X		
	Above-ground pump heads?	X			
	Small sheds or shelters (sometimes resembling dog houses)?	X			
	Electrical transformers on poles for no other apparent use (especially in agricultural settings)?	X			
	Concrete pads surrounding a pipe or opening?	X			
	Depressions in the ground?		X		
	Small lined or unlined pits?	X			
	Simple holes in the ground?		X		
D17	Are there any non-permitted storm water discharges?	X			
D18	Does the adjacent property discharge waste water on to evaluated property?	X			
D19	Does the evaluated property discharge waste water on or adjacent to the property?			X	

Number	Comprehensive Environmental Response, Compensation and Liability Act	YES	NO	N/A	UKN
E1	Has the facility ever generated, transported, or disposed of a hazardous substance as defined by Section 9601(14) of CERCLA?	X			
E2	Are any of the facility wastes disposed of in a manner which would create a release or a threat of release prompting future enforcement or private cost recovery actions?				X
E3	Has the operator/owner ever notified the National Response Center of a reportable quantity release of a hazardous substance into the environment?		X		
E4	Is the owner/operator currently subject to any administrative orders under section 106 of CERCLA, and has it properly complied with all orders issued in the past?		X		
E5	Has the owner/operator received any section 104(e) letters from EPA requesting information concerning material sent to sites listed on the National Priorities List?		X		
E6	Has the company failed to develop a complete history of its past disposal practices, including production of all waste manifests, shipping records, disposal contracts, etc., to determine potential liability under CERCLA?			X	
E7	Has the facility failed to comply with the Emergency Planning and Community Right to Know Act?			X	
E8	Has the company received any notice from adjoining landowners, other potentially responsible parties, or waste disposal facilities that it is responsible under section 107 for cleanup costs or contribution?		X		

Number	Resource Conservation and Recovery Act	YES	NO	N/A	UKN
F1	Does the facility generate, treat, store, transport, or dispose of hazardous waste?		X		
F2	Does the facility accumulate hazardous waste for periods in excess of 90 days?		X		
F3	Does the facility hold a RCRA permit or EPA Waste Generator Number?		X		
F4	Is the facility out of compliance with applicable RCRA regulations?		X		
F5	Has there been any hazardous substances or petroleum products, unidentified waste materials, tires, automotive or industrial batteries or any other waste materials been dumped above grade, buried and/or burned on the property?	X			
F6	Has fill material been brought onto the property that originated from a contaminated site?				X
F7	Has there been any pesticides, paints or other chemicals in individual containers stored on or used at the property or facility?	X			X
F8	Has an imminent and substantial endangerment ever been alleged to be present at the site?	X	X		
F9	Has an audit been conducted at this facility to determine RCRA compliance?		X		
F10	Has an inventory been taken to determine the amount and location of underground storage tanks at the facility?		X		
F11	Are there any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground?				X
F12	Do existing tanks meet all requirements, i.e., financial assurance, leak detection, spill protection, overflow?			X	
F13	Are there any petroleum storage and/or delivery facilities (including gas stations) or chemical manufacturing plants located on adjacent properties?		X		
F14	Are there any active underground or above ground tank facilities on-site for such activities as motor fuel, waste oil or fuel oil storage, hazardous waste or chemical storage in any size?		X		
F15	Have any of the tanks that are more than 10 years old NOT been successfully tested for leaks.		X		
F16	Are there any deactivated USTs on the property?				X
F17	Are there any hydraulic lift sumps for equipment?		X		
F18	Are there any lead screening tests that indicate evidence of lead-based paint?		X		
F19	Was the building constructed prior to 1979?	X			
F20	Is the paint peeling or chipping?	X			

Number	Toxic Substances Control Act	YES	NO	N/A	UKN
	Note: Common synonyms/names for PCBs include chlorodiphenyls, Aroclor, Askarel, Pyranol and Inerteen.				
G1	Did the facility manufacture, process or distribute in commerce any chemical substances regulated by TSCA?		X		
G2	Have adverse consequences been alleged to have been caused by exposure to chemical substances produced by the facility?		X		
G3	Does the company have PCBs on site?				X
G4	Is there a need for a comprehensive PCB survey?	X			
G5	Has the facility failed to comply with all asbestos reporting requirements?		X		
G6	Are there any florescent light ballasts containing PCBs in the building?	X			
G7	Is there any visible or documented evidence of soil or groundwater contamination from PCBs on the property?		X		
G8	Is there evidence of soil discoloration around present or former equipment sites, utility poles, etc.?		X		
G9	Are any of the lights damaged or leaking?	X			
G10	Are any capacitors or transformers inside residential buildings?		X		
G11	Are any transformers or capacitors not clearly marked, well maintained, or secure?			X	
G12	Have PCB concentrations of 50 ppm or greater been found in contaminated soils or groundwater?			X	
G13	Is there any evidence of hydraulic fluid leaks on lifts installed prior to 1980?		X		
	Note: Additional PCB containing materials: carbonless copy paper, brake linings, printers ink, synthetic rubber, natural gas (as a contaminant), microscopy mounting media, fabric coatings, and cutting oils.				

Number	The Safe Drinking Water Act	YES	NO	N/A	UKN
H1	Has there been a discharge of any substance or material at the facility which might find its way into a public water system?				X
H2	Is the property served by a private/non-public water system that has been found to have contaminants in quantities that exceed drinking water guidelines or has it been designated as contaminated?		X		
H3	Does the drinking water at the facility contain lead at levels above 10 ppb?				X

Number	Asbestos Removal and Inspection	YES	NO	N/A	UKN
I1	Was the building constructed prior to 1980?	X			
I2	Has the building been inspected by a certified asbestos removal team since 1980 for the presence of ACM?		X		
I3	Has all friable asbestos been removed or contained so that it does not create the potential for human exposure?		X		
I4	Does the site survey reveal any visible evidence of possible ACM? (boiler insulation, floor tiles, building siding, shingles, roofing felt, wall and ceiling insulation, acoustical ceiling tiles, window putty, fuse boxes, heat reflectors, air duct lining)	X			
I5	Is there any documented evidence of asbestos? (tests, surveys, management plan, etc.)		X		

Number	Waste Disposal Facilities	YES	NO	N/A	UKN
J1	Has there been or are there any pits, ponds, or lagoons associated with waste treatment or disposal?		X		
J2	Is there any evidence of acid pits located on or adjacent to the site?		X		
J3	Is it likely the property was used for illegal or uncontrolled dumping?	X			
J4	Are there any obvious high risk neighbors in adjacent properties engaged in producing, storing, or transporting hazardous wastes, chemicals, or substances?		X		
J5	Was the site ever used for research, industry, or military purposes?	X			
J5	Has any of the site space ever been leased to commercial tenants who are likely to have used, transported, or disposed of toxic chemicals? (e.g. dry cleaner, print shop, service stations, etc.).		X		

Number	Additional Hazards	YES	NO	N/A	UKN
K1	Do the tenant areas contain Urea Formaldehyde Foam Insulation (UFFI) that was installed less than a year ago?		X		
K2	Is there any identifiable UFFI behind exterior-wall switch and outlet cover plates?		X		
K3	Are there any elevated formaldehyde concentrations?				X
K4	Did interviews indicate the presence of UFFI?		X		
K5	Are there any citizen complaints or local law enforcement responses to unexploded munitions (UXO)?		X		
K6	Has the property ever been suspected to contain or been used for military chemical/biological testing?		X		
K7	Has the Army Technical Escort Unit or Army Corps of Engineers responded to UXO or chemical test kits incidents?				X
K8	Do any of the building structures have cannecc (made from sugar cane waste) building materials?				X
K9	Are there any small arms test ranges that have been used to perform function checks on serviced weapons?		X		
K10	Are there any ranges, impact areas, berms, maneuver areas, training areas, OB/OD areas present on the facility?		X		
K11	Is there evidence of any "red dust" (arsenic) from cannecc materials?		X		
K12	Is there documented evidence that Electromagnetic Radiation (EMF) is present on the property?		X		

Number	Natural and Cultural Resources	YES	NO	N/A	UKN
L1	Does the site have any known or potential federal or state threatened & endangered species?		X		
L2	Has an Endangered Species Survey been completed for the area?	X			
L3	Have there been any Biological, Historical, Cultural, Soil, or Aquatic surveys of the site?	X			
L4	Does the site have any erosion problems, i.e. bare areas, gullies, runoff during major storm events?		X		
L5	Does the site have an Integrated Natural Resources Management Plan (IMRMP)?		X		
L6	Have planning level natural resources surveys been conducted on the site (including soils, flora, fauna, wetlands)?	X			
L7	Does the site currently have commercial natural resource activities (timber, agricultural, grazing outleases)?	X			
L8	Do NEPA documents exist that address/authorize natural resource management activities?		X		
L9	Has a noxious weed survey been completed for the area?	X			
L10	Are there any buildings or structures older than 50 years old on the property?		X		
L11	Are there any archeological sites on the property?		X		
L12	Is there a Cultural Resources Management Plan in place for the site?		X		
L13	Are there any known sites of importance to Native American tribes?		X		
L14	Is there a memorandum of agreement or programmatic agreement addressing cultural resources in place?		X		
L15	Have invasive, non-native plant species been identified on the property?	X			
L16	Has there been a wetland survey for the site?		X		
L17	Are there any planned projects to create wetlands on this site?		X		
L18	Are there any planned uses for this site that may impact existing wetlands?		X		
L19	Are there any completed or in progress Environmental Assessments and/or Environmental Impact Statements?	X			
L20	Was the proposed real estate transaction found to have "FNSI" or a "ROD"?			X	
L21	Has a Pest Management Plan been completed for the site?		X		
L22	Does the site have any major pest problems (insects, invasive plants, animals, pathogens, rodents, et cetera)?	X			

GENERAL ENVIRONMENTAL SEARCH	YES	NO	N/A	UKN
Do any of the following Federal government record systems list the property or any property within the the circumference of the area noted below:				
National Priorities List - within 1.0 mile (1.6Km)?		X		
CERCLIS List - within 0.5 mile (0.8 Km)?		X		
RCRA TSD Facilities - within 1.0 mile (1.6 Km)?		X		
Do any of the following state record systems list the property or any property within the circumference of of the area noted below:				
List maintained by state environmental agency of hazardous waste sites identified for investigation or remediation that is the equivalent to NPL - within 0.5 mile (1.6 Km)?		X		
List maintained by state environmental agency of sites identified for investigation or remediation that is the state equivalent to CERCLIS - within 0.5 mile (0.8 Km)?		X		
Leaking Underground Storage Tank (LUST) List - within 0.5 mile (0.8 Km)?		X		
Solid Waste/Landfill Facilities - within 0.5 mile (0.8 Km)?	X			
Based on fire insurance maps or consultation with the local fire department , are there any buildings or other improvements on the property or adjoining property identified as having been used for an industrial use or uses likely to lead to contamination of the property?		X		
The preparer of the transaction screen questionnaire must complete and sign the following statement.				
This questionnaire was completed by:				
Name: Gregg L. Rexroad, CEP; Ken Burkett				
Title: Senior Project Manager; Environmental Specialist III				
Firm: SpecPro, Inc.				
Address: 42 N. Brevard Ave.				
Cocoa Beach, FL 32931				
Phone number: 321-868-7800				
Date: November 2002				
If the preparer is different than the user, complete the following:				
Name of user:				
User's address:				
User's phone number:				
Preparer's relationship to site:				
Preparer's relationship to user:				
Copies of the completed questionnaire have been filed at:				
Copies of the completed questionnaire have been mailed or delivered to:				
Preparer represents that to the best of the preparer's knowledge the above statements and facts are true and correct and to the best of the preparer's actual knowledge no material facts have been suppressed or misstated.				
Signature: _____ Date: _____				

EBS QUESTIONNAIRE FURTHER INFORMATION SHEET	
Number	COMMENT
A 5	A landfill is located within 0.5 miles to the northeast of the property
D 5	A formerly used, but now unserviceable package plant exists on site.
D 11	See D5.
D 14	The WWTP is not in operation, no permits are required for waste discharge as none are generated
D 15	Any change to the current status of the WWTP will require permits
D 16	Wells are present and sealed, pump-heads exist, many small structures exist, numerous pads and pipe combinations Unlined borrow pit. Snake Creek outfall.
D 17	Yes, west side runoff from road to property and FPL utility easement
D 18	Auto in Borrow pit, potential contamination of ground water from WWTP and system
E 1	Nike Hawk missiles and associated cleaning chemicals were formerly transported to and from the property. Although CERCLA was not in place at that time, some of these chemicals are now considered hazardous substances.
F 5	Auto in Borrow pit, tires and junk truck on north section of property
F 7	Yes, numerous aerosol cans of paint are present in floor trenches
F 8	This EBS alleges hazards of this nature
F 19	Buildings on the property were constructed prior to 1979.
F 20	Building paint was observed to be peeling and chipping.
G 4	No indication that any tank testing or structural analysis has been performed
G 6	The fluorescent lights in the buildings pre-date 1979 and are therefore highly suspect of containing PCBs in their ballasts. These light fixtures have been scavenged are in bad repair.
G 9	See G6.
I 1	The site buildings were constructed in 1965.
I 4	During the site visit, possible ACM was observed.
J 3	Uncontrolled dumping on the property has occurred.
J 5	The site is and was formerly a military facility.
L 2	An Endangered Species Survey was performed for this property.
L 3	A Cultural Resource Survey was completed in July 2002.
L 6	A Natural Resources Survey has been performed for this property.
L 7	Cattle grazing occurs on the northern portion of the site.
L 9	The presence of noxious (invasive, non-native) weed species has been documented on the Snake Creek LTA.
L 15	See L9.
L 19	This EBS is prepared to address the ECOP of the property.
L 22	See L 9.
General Env. Search	A landfill is located within 0.5 miles to the northeast of the property.

APPENDIX D

PAST REPORTS

Past (Historical) reports reviewed for the preparation of this EBS are referenced within the text of this document. They include:

Integrated Cultural Resources Management Plan and Environmental Assessment for the Florida Army National Guard, 2002-2006

Threatened and Endangered Species Survey of the Snake Creek Training Site, summer and fall, 2001, David Hall Associates and Pandion Systems, Inc.

Phase 1 Cultural Resources Survey of Snake Creek Weekend Training Facility, November 2001, Southeast Archaeological Research Inc.

APPENDIX E

EBS INFORMATION SEARCH CHECKLIST

INFORMATION SEARCH CHECKLIST

Maps/Atlases/Photographs

- ☒ Topographical - USGS
- ☒ Wetlands Delineation Maps
- ☐ Glacial Deposits
- ☒ Bedrock type & depth
- ☐ Watershed
- ☒ Aquifer classifications
- ☒ Water Table/Potentiometric
- ☐ Mineral Resources
- ☐ Oil & Gas Information
- ☐ Seismic
- ☒ Critical Wildlife Habitat
- ☒ Endangered Species
- ☐ Aerial photos (back to 1940 in 15 yr. intervals)
- ☐ Sanborn & City Atlases
- ☐ Fire Insurance Plans
- ☒ Soil Conservation Survey Maps

Regulator

State/Federal Records

Federal Records

- ☒ CERCLIS
- ☒ NPL
- ☒ RCRA-TSD
- ☒ RCRA Generator List
- ☒ ERNS

State Records

- ☒ State CERCLIS
- ☒ State NPL (SPL)
- ☒ State Solid Waste Disposal Facility List
- ☒ LUST List
- ☒ UST Permit List
- ☒ AST Permit List

SARA Title III Reports

State/Federal Data Bases

- ☐ AIRS
- ☐ DOCKET
- ☐ CMEL
- ☐ RAATS

Public Records

- ☒ Polk records, County, City, & State Directories
- ☐ Engineering Plans/Gas/Water/Electric Utility Maps
- ☐ Gas Utility Plans/Maps
- ☐ Water Utility Plans/Maps
- ☐ Electric Utility Plans/Maps

Surface/Subsurface Data

- ☐ Soil Borings, Test Pits, or Excavations
- ☐ Blasting or Borrow Pit Areas
- ☐ Backfill around Site
- ☐ Local/County Officials

Phone Surveys/Interviews

- ☐ Registry of Deeds
- ☐ Tax Collector/Assessor
- ☐ Board of Health/Health Investigators
- ☐ Fire Department
- ☐ Planning/Zoning Board
- ☐ Sanitary Districts
- ☐ Building Inspector
- ☐ County Commissioner
- ☐ Engineering Department
- ☐ Department of Public Works
- ☐ Water/Sewer Department
- ☐ Emergency Response Personnel
- ☐ Zoning & Planned Use Issues

Agriculture/Livestock History

- ☐ Fruits and Vegetables
- ☐ Field Crops
- ☐ Livestock

Facility History

Radon Assessment

- ☐ Consultant radon survey
- ☐ Drinking water survey
- ☐ On-site radon test results

Asbestos Assessment

- ☒ Building construction rehabilitation specifications
- ☒ Engineer's/Consultant's asbestos report

Polychlorinated Biphenyls

- ☐ CDS
- ☒ FINDS
- ☐ FTTS
- ☒ NESHAPS
- ☐ PADS
- ☐ PCS
- ☐ RODS
- ☐ SETS
- ☐ TRIS
- ☒ TSCA

- ☐ Utility transformer records
- ☐ Site survey of transformers
- ☐ Site soil, groundwater PCB test results
- ☒ Underground Storage Tanks (USTs)
- ☐ Oil, motor fuel and waste oil systems reports
- ☐ Site soil and groundwater tests
- ☒ Site tank survey

☒ Environmental Information Firms

- ☒ See Appendix B

☒ Additional Hazards

- ☒ Urea Formaldehyde Foam Insulation Survey
- ☐ Interior air test results
- ☒ Lead paint survey
- ☐ Lead in drinking water test results
- ☐ Pesticide/Herbicide Management Survey
- ☐ Facility spill reports

☒ Buildings

- ☐ Improvement records
- ☐ Plans & Specifications
- ☐ Directories for Prior Owner/Tenant
- ☒ Environmental site assessment reports
- ☐ Environmental audit reports
- ☐ Community Right-To-Know Plan
- ☐ Geotechnical studies
- ☐ Process Flow Charts
- ☐ Raw Materials Inventory
- ☐ Safety plans
- ☐ Waste Disposal Records/Manifests
- ☐ Soil and Gas Surveys
- ☐ Business Directories
- ☐ Facility Maintenance Records/MSDS Lists
- ☐ Enforcement Order/Agency Inspection
- ☐ Insurance & Environmental documents
- ☐ Building Zoning Records

☒ Real Estate Records (50 years)

- ☐ Deeds
- ☐ Leases
- ☐ Easements
- ☐ Liens
- ☐ Property tax records
- ☐ Real estate sales persons
- ☐ Trial court records for liens
- ☐ Zoning/land use records
- ☐ Restrictive covenants of record

☒ Miscellaneous Sources

- ☐ Historical Societies
- ☐ Libraries
- ☐ U.S. Coast Guard Spill Reports
- ☒ Environmental Protection Agency (EPA)
- ☒ United States Geological Survey (USGS)
- ☐ Defense Technical Information Center (DTIC)
- ☐ U.S. Army Environmental Center Tech. Info. Ctr.
- ☒ Alternative Sources Associated w/Installations
- ☐ Universities
- ☒ Map Archives
- ☐ Phone Directories
- ☐ DoD Non-stockpile Chemical Material Program

☒ State Organizations

- ☐ Waste Management Board
- ☐ Regional Water Quality Control Board
- ☐ State Department of Health Services

☐ Water Supply Data & Water Information
☐ Geophysical Surveys

☐ Air Quality Management District
☐ Geology Department
☐ Department of Pollution Control

☒ Studies/Audits

☐ NEPA (Rec & Check, EAs, EISs)
☒ Historical/Cultural Resources Plans
☐ Facility Environmental or Training Office
☐ Facility Training Office
☐ ACTS
☐ ECAS
☐ DB1383
☐ Self Audits
☐ FUDS

☒ Permits

☐ Corps of Engineers (COE) Permits
☐ Standard Industrial Code (SIC)
☐ Storm Water Runoff Permits
☒ RCRA Permits
☐ Clean Air Act (CAA) Permits
☒ National Pollutant Discharge Elimination
 System (NPDES) Permits

☒ Facility Operations Record

☐ Spill Prevention Control & Countermeasure
 (SPCC) Plan
☐ Material Safety Data Sheets
☐ Occupational Safety & Health Administration (OSHA) Right-
 to-Know Claims
☐ Security Exchange Commission (SEC) and
 Environmental Finding
☒ FINDS Index

APPENDIX F

TERMS

Terms used in this EBS are standard ASTM, EBS, and/or FLARNG terminology. Acronyms used throughout the document may be identified in Section 11.0, Acronyms and Abbreviations.

APPENDIX G

Maps

Maps relevant to this EBS are contained within appropriate section of the EBS text body.

APPENDIX H

Ownership/Historical Documentation

Please see Section 4.2 of the body of this EBS for the Snake Creek LTA ownership and historic information.

APPENDIX I

REGULATORY DOCUMENTATION

Regulatory documentation reviewed in the preparation of this EBS includes:

Research conducted for the preparation of this EBS included a review of the following documents:

Federal ASTM Standard Sources;

- National Priority List (NPL)
- Proposed NPL
- SuperFund (CERCLIS) No Further Remedial Action Planned (CERC-NFRAP)
- Corrective Action Reports (CORRACTS)
- Resource Conservation and Recovery Information System (RCRIS)
 - Temporary Storage Depot (TSD) database
 - Large Quantity Generator (LQG) database
 - Small Quantity Generator (SQG) database
- Emergency Response Notification System (ERNS)

Federal ASTM Supplemental Sources;

- SuperFund (CERCLA) Consent Decrees (CONSENT)
- Records Of Decision (ROD.)
- National Priority List Deletions (Delisted NPL)
- Federal SuperFund Liens (NPL Liens)
- Facility Index System/Facility Identification Initiative Program Summary Report (FINDS)
- Hazardous Materials Information Reporting System (HMIRS)
- Material Licensing Tracking System (MLTS)
- Mines Master Index File (MINES)
- PCB Activity Database System (PADS)
- RCRA Administrative Action Tracking System (RAATS)
- Toxic Chemical Release Inventory System (TRIS)
- Toxic Substances Control Act (TSCA)
- Section 7 Tracking Systems (SSTS)
- Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA)/ Toxic Substances Control Act (TSCA) Tracking System (FTTS FIFRA/ TSCA)

State ASTM Standard Sources

- Florida's State-Funded Action Sites (SHWS)
- Solid Waste Facility Database (SWF/LF)

State and Local ASTM Supplemental Sources

- FTI02 - Facility/Owner/Tank Report (AST)
- Florida Sites List
- Florida Cattle Dipping Vats database
- Oil and Hazardous Materials Incidents database
- Priority Cleaners Ranking List
- Dry-cleaning Facilities List
- Wastewater Facility Regulation Database

APPENDIX J

INTERVIEW RECORDS

SpecPro personnel performing this EBS incorporated interview records and notes into the completed EBS Questionnaire.

APPENDIX K

FOIA REQUESTS AND RESPONSES

There were no Freedom of Information Act (FOIA) requests made during the conduct of this EBS.